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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Annual Assessment of the Status of	)	CS Docket No. 95-61
Competition in the Market for the	)	
Delivery of Video Programming	)	

**SECOND ANNUAL REPORT**

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By the Commission: Commissioner Barrett issuing a separate statement.

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## I. INTRODUCTION

1. Section 628(g) of the Communications Act of 1934, as amended, directs the Commission to report annually to Congress on the status of competition in the market for the delivery of video programming.<sup>1</sup> This is the Commission's second report issued in compliance with this statutory requirement.<sup>2</sup> This second report ("*1995 Report*") is based on publicly available data, filings in various Commission rulemaking proceedings, and information submitted by commenters in response to a *Notice of Inquiry* ("*NOI*") in this docket.<sup>3</sup>

### A. Scope of this Report

2. The purpose of this *1995 Report* is to provide data and information that summarizes the status of competition in the market for the delivery of video programming and that updates our *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, First Report* ("*1994 Report*").<sup>4</sup> We begin this *1995 Report* with an examination of the cable television industry, other existing multichannel video programming distribution technologies, and potential competitors to cable television (Section II). Among the alternative distribution technologies and providers discussed in this section are direct-to-home ("DTH") satellite services, including direct broadcast satellite ("DBS") services and home satellite dishes ("HSDs"), wireless cable systems using frequencies in the multichannel multipoint distribution service ("MMDS") or local multipoint distribution service ("LMDS"), local exchange telephone carriers ("LECs"), satellite master antenna television ("SMATV") systems, and broadcast television service. We also consider several other existing and potential distributors of video programming, such as electric utilities, and other distribution technologies, including video cassette recorders ("VCRs"), interactive video and data services ("IVDS"), and the Internet.

3. Section III of this *1995 Report* examines market structure and competition. We evaluate horizontal concentration in the cable television industry in Section III.A. In Section III.B, we evaluate vertical integration between cable television systems and programming services, and report on issues of access to programming. Finally, we address

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<sup>1</sup> Communications Act of 1934 ("Communications Act") § 628(g), 47 U.S.C. § 548(g).

<sup>2</sup> The Commission released its first report pursuant to this statutory requirement on September 28, 1994. *Implementation of Section 19 of the 1992 Cable Act (Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming)*, First Report, CS Docket No. 94-48, 9 FCC Rcd 7442 (1994).

<sup>3</sup> *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Notice of Inquiry, CS Docket No. 95-61, 10 FCC Rcd 7805 (1995). A list of these submitted comments and reply comments is set forth in Appendix A.

<sup>4</sup> *1994 Report*, 9 FCC Rcd at 7558 ¶ 253.

technical advances in Section III.C.

4. Our assessment of the status of competition in the market for the delivery of video programming is presented in Section IV. In this section, we examine the extent of competition and evaluate market performance. We also report on existing and potential impediments to entry and competition, including strategic behavior that could deter entry and regulatory, legal, and other potential impediments.

## **B. Summary of Findings**

5. We conclude that cable television systems remain the primary distributors of multichannel video programming services and continue to enjoy market power in local markets, although some progress has begun toward a competitive marketplace for the distribution of video programming. In the last year, DBS systems have attracted many subscribers to newly available services. MMDS and SMATV systems have also continued to increase in subscribership. Several LECs, however, have modified their plans for wire based video service, including video dialtone ("VDT") service, from the scale of entry reported last year. Some LECs are continuing their deployment of wire based facilities in selected markets, either through VDT or traditional cable systems. In other cases, LECs appear to be focusing their efforts on wireless entry through investment in MMDS facilities. In sum, while subscribership for distributors using alternative technologies has generally increased over the last year, overall subscribership for all distributors using alternative technologies is just 9% of total multichannel video programming distributor ("MVPD") subscribership, whereas cable systems account for 91% of the total.<sup>5</sup> Over the long term, it is difficult to predict the extent to which local markets will be characterized by vigorous rivalry among multiple distributors, or the extent to which distributors using alternative technologies may remain essentially "fringe" competitors, with relatively small market shares or offering services largely differentiated from other services, at least from those multichannel packages offered by cable systems. In addition, technological advances, particularly the conversion from analog to digital transmission, may affect the nature and cost of the services provided by cable operators and other MVPDs, and consequently, the extent of rivalry in markets for the delivery of video programming.

6. In this *1995 Report*, the Commission makes the following findings:

7. *Cable Industry Growth.* Since the *1994 Report*, subscriber penetration, average system channel capacity, the number of programming services available, revenues, expenditures on programming, and capital investment generally have increased for the cable industry. The number of homes passed by cable grew from approximately 90.6 million at the end of 1993 to approximately 91.6 million at the end of 1994, which is 96% of all television households in the United States.<sup>6</sup> The number of subscribers increased from 57.2 million to

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<sup>5</sup> *Infra* Appendix G, Table 1.

<sup>6</sup> *Infra* Appendix B, Table 1.

59.7 million between the end of 1993 and the end of 1994. Penetration (i.e., the number of subscribers as a percent of homes passed) rose 3.3% from the end of 1993 to a penetration of 65.2% at the end of 1994.<sup>7</sup> Channel capacity grew slightly, with 97% of all subscribers now receiving service from systems that can provide at least 30 channels. Cable systems with the capacity to offer more than 53 channels accounted for the biggest growth during 1994, with a 9.9% increase in the number of systems, and a 10.1% increase in the number of subscribers.<sup>8</sup> Total cable revenues, as well as revenues from regulated services, remained stable over the year. The industry's cash flow, a measure of earnings before interest, taxes, depreciation, and amortization, was \$9.94 billion in 1994, a 1.6% decline from the 1993 industry cash flow of \$10.1 billion.<sup>9</sup> Capital expenditures continue to increase, rising 28% to \$3.8 billion in 1994.<sup>10</sup>

8. *Horizontal Concentration.* Since 1994, there has been an increase in the horizontal concentration of cable multiple system operators ("MSOs") nationwide. A number of cable MSO acquisitions and system trades have resulted in increased regional concentration, or "clustering," of cable system ownership. Based on recent reports of additional proposed transactions, it appears that this trend will continue as cable operators consolidate their holdings regionally. Although the cable industry tends to be moderately concentrated nationally, local markets for the distribution of multichannel video programming tend to be highly concentrated as measured by subscribership among all MVPDs.<sup>11</sup>

9. *Competitive Entry.* The percentage of subscribers choosing competitive alternatives to incumbent cable operators has increased since our last report, although cable subscribership continues to dwarf the combined subscribership of all other MVPDs. In September 1995, cable television systems served 61.7 million households, while all other MVPDs combined (i.e., DBS, HSD, MMDS and SMATV systems) served 5.8 million homes.<sup>12</sup> Although market share is not dispositive evidence of market power, we cannot conclude that a competitive market currently exists for the delivery of video programming. However, some progress towards a competitive marketplace has begun. In particular, we find:

- There continue to be only a few scattered areas of the country where local cable systems face direct competition through "overbuilding" (where two franchised cable television systems compete directly with each other), although

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<sup>7</sup> *Id.*

<sup>8</sup> *Id.*, Tables 3-4.

<sup>9</sup> *Id.*, Table 6.

<sup>10</sup> Paul Kagan Assocs., Inc., *The Cable TV Financial Databook 92* (1995) ("*1995 Cable Financial Databook*").

<sup>11</sup> *Infra* sec. III.A.

<sup>12</sup> *Infra* Appendix G, Table 1.

instances of overbuild competition, particularly from LECs, appear to be increasing;

- Direct-to-home satellite services continue to increase their subscribership. DBS services are now available in all states except Hawaii. The number of subscribers to DBS services has more than doubled since the end of 1994, increasing from 602,000 to approximately 1.7 million subscribers. Prices have declined for some DBS receiving equipment (i.e., satellite dishes and set-top decoders) used by those distributors that require subscribers to buy their own equipment. There are currently 2.3 million subscribers to packaged programming services that distribute satellite programming to HSD users compared with 2.2 million in 1994;
- Wireless cable systems experienced a 33% growth in subscribers since the end of 1994, and now serve approximately 800,000 subscribers. The first wireless cable trial of digital technology, which will increase a system's coverage area and the number of channels that it can offer, has been successfully completed.<sup>13</sup> In addition, several LECs have made substantial investments in wireless cable operations. The deployment of wireless video services also has been facilitated by the streamlining of the Commission's application process, adoption of competitive bidding procedures, and expansion of the protected service areas for licensees. The Commission also released a notice of proposed rulemaking seeking comment on its proposal to allocate a portion of the 28 GHz band to LMDS, which can be used for the distribution of video programming;<sup>14</sup>
- The VDT framework adopted by the Commission in 1992 allows LECs to construct and operate common carrier platforms that can be used by program packagers to provide programming and other services to subscribers in the LEC's telephone service areas. Subsequent court decisions and Commission actions permit LECs to offer video programming in their service areas. The first permanent commercial VDT system is expected to begin operation in Dover Township, New Jersey, by the end of 1995. Additional applications for permanent authorizations and trials, including U S West Inc.'s ("U S West") plan for Omaha, have been approved. The Commission also streamlined the Section 214 process for some LECs to construct stand alone cable systems within their local service areas. Since the *1994 Report*, some LECs have

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<sup>13</sup> *Infra* sec. II.C.

<sup>14</sup> *Rulemaking to Amend Parts 1, 2, 21 & 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules & Policies for Local Multipoint Dist. Serv. & for Fixed Satellite Services*, Third Notice of Proposed Rulemaking & Supplemental Tentative Decision, CC Docket No. 92-297, \_\_ FCC Rcd \_\_, FCC 95-287 (July 28, 1995), summarized at 60 Fed. Reg. 43740 (Aug. 23, 1995) ("*Third 28 GHz NPRM*").

modified their plans for entry into video distribution markets and, in addition to pursuing VDT deployment, have announced plans to enter the market using either wired cable or wireless cable facilities. A number of LECs also have announced joint ventures to collaborate on the production and acquisition of video programming;

- SMATV systems have increased their number of subscribers from a combined total of approximately 850,000 to approximately 950,000 since the end of 1994. The industry also appears to be attracting new investment from other sectors, both within and outside the telecommunications industry;
- Regulatory changes and technological advances may, at some point in the future, permit existing and potential video technologies -- broadcast television, low power television ("LPTV"), LMDS -- to be used to distribute multichannel video programming. Other potential distributors, such as electric utilities, and other technologies, including VCRs, IVDS, and the Internet, also may, in the future, affect the nature of competition; and
- Technological advances are occurring that will permit MVPDs to increase the quantity of service (i.e., increased number of channels using the same amount of bandwidth or spectrum space) and types of offerings (e.g., interactive services). New system architectures are being developed that combine fiber optic wires and coaxial cables to expand the uses of wired transmission media. Digital compression is currently being deployed, which will enhance the service of both wired and wireless providers by allowing increased channel capacity and the provision of video, voice, and data services that cannot be offered currently. On the basis of the information reported, however, it is unclear which distributors will benefit the most from these technological advances -- existing cable operators or their existing and potential competitors.

10. *Vertical Integration.* The number of cable programming services increased from 106 to 129 over the past year. Of these 129 services, 66 are vertically integrated, representing approximately 51% of all national services, which is a slight decline from last year's figure of 53%. The Commission's program access and program carriage rules, and its decisions applying those rules, seem to have been successful in ensuring the availability to competing MVPDs of programming services produced by affiliates of cable MSOs.

## II. COMPETITORS IN MARKETS FOR THE DELIVERY OF VIDEO PROGRAMMING

### A. Cable Industry

11. In this section, we address the performance of firms that own or operate franchised cable systems. The performance section is divided into three categories: (1) output performance -- both quantitative measures of the current amount of cable industry services that are being produced (including recent trends in that production) and qualitative measures of the nature of the service, which is related to output since higher quality services are more highly valued and, therefore, can be thought of as increased output; (2) financial performance -- the revenues and cash flow that are generated by the industry's output; and (3) capital acquisition and disposition -- the amount of funds companies have been able to raise and use to improve their existing physical plant and acquire new systems,<sup>15</sup> and how they have chosen to allocate those funds. In addition, this section discusses the status of overbuilding, one of the oldest forms of competition to the cable industry, and the limited evidence of the cable industry's response to existing and potential competition.

12. While we report and analyze statistical information in this section, we do not specifically evaluate the effects of a number of rule changes adopted during the past year that could affect industry performance and competition. In reviewing these figures, however, we note that the Commission's revised rate regulations instituting the 17% benchmark ("Second Cable Rate Order") became effective July 31, 1994.<sup>16</sup> The rules allowing new product tiers and additional programming services ("Going Forward Rules") became effective on January 1, 1995,<sup>17</sup> and the amendment of our rules relating to small systems ("Small System Order") has effective since August 21, 1995.<sup>18</sup>

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<sup>15</sup> The consolidation in the cable industry brought about by these transactions is discussed below. *Infra* sec. III.A.

<sup>16</sup> See, e.g., *Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992 (Rate Regulation)*, Second Order on Reconsideration, Fourth Report and Order, and Fifth Notice of Proposed Rulemaking, MM Docket No. 92-266, 9 FCC Rcd 4119 (1994) (adopted Feb. 2, 1994).

<sup>17</sup> See *Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992 (Rate Regulation)*, Sixth Order on Reconsideration, Fifth Report and Order, and Seventh Notice of Proposed Rulemaking, MM Docket No. 92-266, 10 FCC Rcd 1226 (1994) (adopted Nov. 10, 1994).

<sup>18</sup> See *Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992 (Rate Regulation)*, Sixth Report and Order and Eleventh Order on Reconsideration, MM Docket No. 92-266, 10 FCC Rcd 7393 (1995) (adopted May 5, 1995).



## 1. *Output Performance*

13. *Cable Industry Output.* Since we released the *1994 Report*, the cable industry has continued to expand. The number of homes capable of receiving service from a cable system (commonly referred to as homes passed) grew from approximately 90.6 million at the end of 1993<sup>19</sup> to approximately 91.6 million at the end of 1994, a 1.1% increase.<sup>20</sup> Thus, 96% of all television households in the United States have cable service available to them.

14. The year-end figures for the industry's basic service tier subscribership grew from a total of 57.2 million in 1993 to 59.7 million in 1994, a 4.4% increase. This is the largest increase since 1990, and is reflected in the industry's basic cable penetration level, which rose by 3.3% from 63.1% to 65.2% of homes passed.<sup>21</sup> This increase in penetration is the largest annual increase since Paul Kagan Associates, Inc. ("Kagan") began tracking penetration figures in 1977.<sup>22</sup>

15. Premium service subscribership showed similar growth trends. The number of homes subscribing to at least one premium channel grew by 6.4% in 1994 from approximately 26.4 million to approximately 28.1 million homes. At the same time, the total number of subscribers to premium channels grew by 8.4% from approximately 41.5 million to approximately 45 million.<sup>23</sup>

16. There is some evidence that the subscribership growth reported for 1994 has continued in 1995. A.C. Nielsen Co. estimates that total cable subscribership increased by

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<sup>19</sup> The figure for homes passed in 1993 that was used in the *1994 Report* was 92.9 million. The source for that figure, Paul Kagan Associates, has since revised its numbers. This is the first of several instances where independent analysts have made revisions since the *1994 Report*. Wherever possible, this *1995 Report* uses the most recently available figures.

<sup>20</sup> *Infra* Appendix B, Table 1 (summarizing information, from, *inter alia*, Paul Kagan Assocs., Inc., *History of Cable and Pay-TV Subscribers and Revenue*, Cable TV Investor, June 30, 1995, at 5). Tables 2-11 referred to in this section are included in Appendix B.

<sup>21</sup> According to figures released by A.C. Nielsen, Inc., cable penetration grew from 63.0% to 64.0% between February 1994 and February 1995. *Compare* National Cable Television Assoc., *Current Estimates*, Cable Television Developments, April 1994, at 1 with National Cable Television Assoc., *Current Estimates*, Cable Television Developments, Spring 1995, at 1. Based on data contained in documents filed by MSOs with the Securities and Exchange Commission, the Commission believes that the estimates made by Kagan reflect more accurately the growth of subscribership in the cable industry in 1994.

<sup>22</sup> *Infra* Appendix B, Table 1.

<sup>23</sup> *Id.* Table 2.

4.1% in the first half of 1995<sup>24</sup> and, according to financial analysts, the industry has maintained subscriber growth of over 4% through the first three quarters of 1995.<sup>25</sup>

17. *Cable Industry Services.* During 1994, average channel capacity increased slightly. In 1993, cable systems with the capacity to offer 30 or more channels accounted for over 77% of all cable systems. The equivalent figure for 1994 was 78%. Cable systems with more than 53 channels accounted for the biggest growth in channel capacity during 1994. Of the 141 systems that upgraded to a capacity of 30 or more channels, 129 of them can offer 53 or more channels. At the same time, systems with channel capacities of 12 or fewer channels declined from 7.2% of cable systems in 1993 to 6.7% in 1994.<sup>26</sup>

18. During 1994, the number of subscribers served by such high capacity systems (53 or more channels) grew by 10.1% to 23 million. Moreover, the number of subscribers receiving service from systems with at least 30 channels rose 2.2% to 53.8 million at the end of the year, which accounted for 96.9% of all subscribers.<sup>27</sup>

19. Since the *1994 Report*, there has also been growth in the number of cable programming choices. The number of basic programming networks grew from 80 at the end of 1993 to 94 at the end of 1994. The number of premium networks increased from 9 to 20 over the same period. Overall, the number of programming networks increased by over 26.7%, from 101 to 128.<sup>28</sup> In addition, 18 additional networks have announced plans to launch service by the end of 1995, and 62 more have announced plans to launch after 1995.<sup>29</sup>

20. Over the past decade, the number of television viewers watching non-premium cable programming networks has grown. Between the 1984-85 and 1993-94 seasons, the combined audience of such cable networks increased from an 11% share to a 26% share of television households.<sup>30</sup> During the same period, the combined audience of the network-

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<sup>24</sup> John M. Higgins & Richard Katz, *It's Basic: MSOs Having Strong Year*, Multichannel News, July 17, 1995, at 110.

<sup>25</sup> Jessica Reif, *3Q Preview*, Media & Entertainment, Oct. 6, 1995, at 3.

<sup>26</sup> *Infra* Appendix B, Table 3.

<sup>27</sup> *Id.* Table 4.

<sup>28</sup> *Id.* Table 5.

<sup>29</sup> *Infra* Appendix H, Tables 3-4.

<sup>30</sup> National Cable Television Assoc., *Viewing Shares: Broadcast Years 1983/1984-1993/1994*, Cable Television Developments, Spring 1995, at 5. The share is the percentage of television households watching the networks. The sum of reported audience shares exceeds 100% due to multiple set viewing.

affiliated, independent, and public broadcast television stations has decreased from an 87% share to a 77% share of television households.<sup>31</sup> This growth in the viewership of the cable networks seems to have continued into 1995. The average prime time share of the cable networks for the first fifty-one weeks of the television season increased 12.5% between the 1993-1994 and 1994-1995 seasons, to 29% of television households.<sup>32</sup>

21. License fees paid by cable system operators to non-premium cable network programmers increased by 15.8% from \$1.9 billion in 1993 to \$2.2 billion in 1994.<sup>33</sup> At the same time, license fees paid by cable system operators to premium cable network programmers increased by 5.6% from \$1.8 billion in 1993 to \$1.9 billion in 1994.<sup>34</sup>

22. *Consumer Satisfaction.* In an effort to improve consumer satisfaction, the cable industry, through the National Cable Television Association ("NCTA"), launched a new on-time guarantee program on March 1, 1995. Under this program, operators promise that: (1) if an installation appointment is not performed on time, the installation will be done for free, and (2) if a service appointment is not performed on time, the customer will receive a \$20 refund.<sup>35</sup> This initiative has been adopted by cable systems serving 25 million subscribers, but the effect of the initiative is unclear.<sup>36</sup>

## 2. *Financial Performance*

23. *Cable Industry Revenue.* Analysts report that after growing by over 8% in 1993, the industry's revenue remained essentially the same in 1994, growing only from \$22.76 billion to \$22.79 billion.<sup>37</sup> For the purposes of this report, we estimate the annual,

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<sup>31</sup> *Id.*

<sup>32</sup> Jim McConville, *Ratings Records*, Broadcasting & Cable, Sept. 18, 1995, at 41.

<sup>33</sup> Paul Kagan Assocs., Inc., *Economics of Basic Network Programming (1985-1996)*, Cable TV Programming, July 31, 1995, at 2.

<sup>34</sup> Veronis, Suhler & Associates, *The Veronis, Suhler & Associates Communications Industry Forecast* 164 (1995).

<sup>35</sup> National Cable Television Assoc., *Preliminary On-Time Guarantee Statistics*, The Future Is On Cable: Establishing Cable as a Telecommunications Leader, Progress Report, Spring 1995, at 3.

<sup>36</sup> Jim Forkan, *The Cablevision-Chilton Consumer Poll*, Cablevision, May 8, 1995, at 22.

<sup>37</sup> *Infra* Appendix B, Table 6.

industry-wide total revenues from 1992 to 1994.<sup>38</sup> Based on these estimates, it appears that the industry generated revenue of over \$20.35 billion in 1992, \$22.45 billion in 1993, and \$22.59 billion in 1994.<sup>39</sup> The 1994 figure represents an increase of 0.1% from 1993, which is consistent with reports by industry analysts.

24. Using the figures produced by industry analysts, it appears that the cable industry generated \$389.50 in annual revenue per subscriber served in 1994. This figure was over \$5 lower than the \$404.89 generated in 1993. When total cable system revenue is broken down by source, between 1993 and 1994, revenue from regulated tiers (referred to by the Commission as the basic service and cable programming service tiers) remained unchanged. It appears that revenue from premium services declined by 2.2%, continuing a downward trend since reaching its all-time high in 1990. Revenue from advertising, pay-per-view, and home shopping grew 9.5%, 7.1%, and 12.4% respectively.<sup>40</sup>

25. In Table 8 of Appendix B, we present detailed, quarterly revenue results for sixteen publicly held MSOs, including the eight largest. For each quarter of 1994 and the first two quarters of 1995, total revenue growth over the same quarters of the previous year is calculated for these sixteen MSOs based on their filings with the Securities and Exchange Commission ("SEC"). As of December 31, 1994, these sixteen MSOs served over 35.3 million of the industry's 59.7 million subscribers, which accounts for 59.1% of the industry. Based on the combined revenues of these MSOs, an estimate of the total industry's revenue was made and is also presented in the table.

26. As can be seen in Table 8, after showing slow growth in the first quarter of 1994 (1.1%) and decreasing revenue in the second and third quarters of 1994 (-1.2% and -0.2% respectively), the industry's revenue increased in each of the following three quarters. In the fourth quarter of 1994, the industry's revenue was 2.8% higher than in the fourth quarter of 1993. The revenues for the first and second quarters of 1995 were 5.6% and 10.4% higher, respectively, than the revenue produced in the same periods of 1994.

27. *Cable Industry Expenditures and Earnings Before Interest, Taxes, Depreciation, and Amortization.* Measurements of earnings before interest, taxes, depreciation, and amortization ("EBITDA"), commonly referred to as "cash flow" by the industry, are often used to value the financial position of cable firms. Analysts report that after growing by

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<sup>38</sup> The Commission arrived at its estimate of industry-wide revenue by analyzing and extrapolating from publicly available information for 25 of the largest cable MSOs, which served a combined 65.3% of the industry's subscribers at the end of 1994. To the extent that there are significant differences between the average financial performance of these large MSOs and that of smaller MSOs, those differences may affect the reliability of industry-wide estimates.

<sup>39</sup> *Infra* Appendix B, Table 7.

<sup>40</sup> *Infra* Appendix B, Table 6.

4.1% to \$10.1 billion in 1993, industry wide cash flows declined 1.6% in 1994 to \$9.94 billion.<sup>41</sup> For the purposes of this *1995 Report*, the Commission has also produced an estimate of annual, industry-wide cash flows from 1992 to 1994.<sup>42</sup> Based on the Commission's estimates, it appears that the industry generated cash flow of \$9.35 billion in 1992, \$10.27 billion in 1993, and \$9.93 billion in 1994.<sup>43</sup> The 1994 figure represents a decline of 3.3% from 1993 which, although somewhat larger than the decrease shown by the analysis referred to above, appears to broadly confirm that analysis.

28. Using the figures produced by industry analysts, it appears that the cable industry generated \$169.85 in annual cash flow per subscriber served in 1994. This figure was nearly \$10 lower than the \$179.72 generated in 1993, and almost \$9 lower than the \$178.64 per subscriber generated in 1992. The ratio of cash flow to revenue ("cash flow margin") declined from 46.1% in 1992 to 44.4% in 1993, and again to 43.6% in 1994.<sup>44</sup>

29. An analysis of the industry's cash flow for the full year may not provide a complete picture of the trend in the industry's performance during that year. A more informed analysis may be provided by comparing each quarter of 1994, and the first two quarters of 1995, with the same quarters of the previous year. These quarterly growth rates are shown in Appendix B, Table 9. After exhibiting declining cash flow compared to the same quarter of the previous year for the first three quarters of 1994 (-3.8%, -7.2%, and -8.4%, respectively), the industry's cash flow improved in each of the following three quarters. Cash flow for the fourth quarter of 1994 was the same as in the fourth quarter of 1993, and then grew by 3.6% and 6.1%, respectively, in the first and second quarters of 1995 over the first and second quarters of 1994. Analysts are predicting a healthy third quarter financial performance from the cable industry with most MSOs predicted to report double digit average cash flow growth for the quarter.<sup>45</sup>

### 3. *Capital Acquisition and Disposition*

30. Historically, the cable industry has relied on various combinations of private and public financing, with the exact distribution of these combinations varying greatly from year to year. After several years of declines in the issuance of private debt (i.e., debt held by

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<sup>41</sup> *1995 Cable Financial Databook*, *supra*, at 92.

<sup>42</sup> As with the Commission's industry wide revenue estimate, this cash flow estimate is based on extrapolation from publicly available information for 25 of the largest cable industry MSOs, and is subject to the same caveat about the reliability of industry-wide estimates. See *supra* note 38.

<sup>43</sup> *Infra* Appendix B, Table 7.

<sup>44</sup> *Id.* Table 6.

<sup>45</sup> Reif, *supra*, at 3.

banks, insurance companies, and institutional investors), banks displayed an interest in lending to cable operators in 1994, especially the larger MSOs. New private debt financing totalled \$4.8 billion in 1994, and public debt financing totaled \$1.1 billion.<sup>46</sup> The remaining industry financing is obtained through a mixture of private equity (i.e., individuals, venture capital firms, investment banks, limited partnerships) and public equity offerings (i.e., stock markets). New private and public equity offerings totalled \$409 million and \$461 million, respectively, in 1994. Overall, the cable industry obtained \$6.7 billion in new financing in 1994, which was its highest level since 1989, and an increase of \$4.8 billion over the 1993 total.<sup>47</sup>

31. *Cable Industry Financing: Recent Developments.* The growth trend exhibited in 1994 has continued into the first six months of 1995. Cable operators are reported to have raised approximately \$5 billion in capital during the first half of 1995. Included in this total was a net redemption of \$200 million of privately held debt;<sup>48</sup> \$3.8 billion was raised in the bond market;<sup>49</sup> \$615 million was raised in the privately equity market;<sup>50</sup> and \$800 million was raised in the public equity market.<sup>51</sup>

32. The growth in total financing during 1994 helped increase the cash available to the cable industry for investment (equal to cash flow from operations plus cash from new financing) to its highest level ever. The \$16.7 billion available in 1994 was an increase of 39.2% over the \$12 billion that was available in 1993.<sup>52</sup> With this increase in funds available for investment in 1994, the cable industry's major MSOs were able to increase internal capital expenditure programs and system acquisition efforts.

33. *Capital Expenditures.* In 1994, the cable industry invested \$3.8 billion in construction of new plant and equipment (including maintenance, inventory, system upgrades,

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<sup>46</sup> *Infra* Appendix B, Table 10.

<sup>47</sup> *Id.*

<sup>48</sup> Paul Kagan Assocs., Inc., *Cable TV Finance*, Aug. 31, 1995, at 1.

<sup>49</sup> *Id.*

<sup>50</sup> Paul Kagan Assocs., Inc., *Cable TV Financing: Public Debt Market Still Popular*, *Cable TV Finance*, July 31, 1995, at 8.

<sup>51</sup> This figure was calculated from the \$1.7 billion reported in Paul Kagan Assocs., Inc., *Cable TV Financing: Public Debt Market Still Popular*, *Cable TV Finance*, July 31, 1995, at 8, and adjusted to account for the \$900 million stock swap which was part of Cox Communications, Inc.'s ("Cox's") acquisition of Times Mirror's cable systems described in Paul Kagan Assocs., Inc., *Cable Financing: All The New Equity Isn't Just Cash*, *Cable TV Finance*, Mar. 31, 1995, at 5.

<sup>52</sup> *1995 Financial Databook*, *supra*, at 92.

converters, the passing of new homes, and the rebuilding of existing systems). This was a 27% increase over the \$3 billion spent on construction in 1993. It also represents the second straight year of increases in capital expenditures by the industry.<sup>53</sup> Moreover, at least one analyst predicts that capital investment will continue to increase in 1995 and the large amount of new capital raised in first half of 1995 also points toward a further increase in capital expenditures for 1995.<sup>54</sup> This increased investment may be attributed to several factors, including preparing for future competition and general maintenance and system extensions.<sup>55</sup>

34. *Cable System Transactions.* Between 1987 and 1993, the number of cable systems being sold each year declined, while the total number of subscribers served by systems sold each year increased.<sup>56</sup> This trend continued through 1994, and appears to be continuing in 1995. In 1994, the number of cable companies and systems that changed hands decreased by 33%,<sup>57</sup> while the number of subscribers to, and homes passed by, systems changing hands increased by 95% and 88%, respectively. In addition, the total dollar value of acquisitions increased 69% between 1993 and 1994. However, the average dollar value per subscriber of these acquisitions decreased by 13% (from \$2,160 to \$1,869) and the average cash flow multiple decreased by 9% (from 11.3 to 10.3). Overall, transactions announced in 1994 involved more subscribers and higher purchase prices than in any year since 1988.<sup>58</sup>

35. This year, the average size of cable system acquisitions in terms of subscribers, homes passed, and dollar value has remained approximately the same as in 1994. However, the number of acquisitions has increased. For the seven months from January to July of 1995, 63 acquisitions were announced, involving 7.3 million subscribers, 11.4 million homes passed, and purchase prices totaling \$13.5 billion dollars, all of which nearly equal the figures reported for all of 1994.<sup>59</sup>

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<sup>53</sup> *Id.*

<sup>54</sup> Kagan is projecting 12% growth in capital expenditures by cable MSOs in 1995. *Id.*

<sup>55</sup> Richard Bilotti & Marc Nabi, *Cable Television Industry: The Financial Scorecard - Appreciating Depreciation*, Morgan Stanley Industry Research, Aug. 1, 1995, at 1, 4.

<sup>56</sup> *1994 Report*, 9 FCC Rcd at 7461 ¶ 36.

<sup>57</sup> *Infra* Appendix B, Table 11. Transactions announced since 1994 are listed *infra* Appendix G, Table 5.

<sup>58</sup> Paul Kagan Assocs., Inc., *Year-To-Date Cable System Sale Summary*, Cable TV Investor, Jan. 31, 1995, at 8.

<sup>59</sup> *Infra* Appendix B, Table 11.

#### 4. *Status of Overbuilding*

36. The term "overbuild" is used in this *Report* to refer to a situation in which two or more wireline cable television systems directly compete for subscribers in a local market.<sup>60</sup> The *1994 Report* surveyed a substantial body of empirical evidence, obtained by the Commission and academic researchers, which indicated that overbuild competition results in lower rates for both basic and pay cable television services.<sup>61</sup> One recent empirical analysis of overbuilding also shows a positive correlation between overbuild competition and the availability of an increased number of cable programming services.<sup>62</sup> Although the benefits of overbuild competition are apparent and desirable, the *1994 Report* concluded that "the extent of overbuilding seems to have remained quite limited."<sup>63</sup>

37. Several planned overbuilds that were reported in the *1994 Report* have yet to be constructed. For example, as of February 1995, plans we noted last year by Cablevision Systems Corp. ("Cablevision") to overbuild several cable systems in New Jersey were reported to be "strictly at the drawing board" stage and had not advanced beyond the initial research point.<sup>64</sup> The *1994 Report* also discussed plans by Fibervision, a firm started by former cable executives, to overbuild systems operated by Tele-Communications, Inc. ("TCI") in Hartford, Connecticut, and the status of litigation brought by TCI that delayed construction of the overbuild.<sup>65</sup> In August 1995, the Connecticut State Supreme Court rejected TCI's appeal of a lower court decision, which dismissed TCI's challenge to the Connecticut Department of Public Utility Control's grant of a Hartford cable franchise to Fibervision.<sup>66</sup> That appeal has been reportedly seen as Fibervision's primary obstacle to obtaining financing and starting

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<sup>60</sup> *1994 Report*, 9 FCC Rcd at 7469 ¶ 54.

<sup>61</sup> *Id.* at 7472-73 ¶¶ 58-60.

<sup>62</sup> Jennifer Fearing & Charles Lubinsky, *Qualitative Differences in Competitive Cable Markets Prior to Rate Reregulation 4-5* (Southern Economics Ass'n, 1995 Annual Conference).

<sup>63</sup> *1994 Report*, 9 FCC Rcd at 7473 ¶ 60.

<sup>64</sup> Michael Burgi, *Building Blocks; Cable Companies Battle Over Subscribers*, *Mediaweek*, Feb. 6, 1995 at 14.

<sup>65</sup> *1994 Report*, 9 FCC Rcd at 7473 ¶ 60 n.137.

<sup>66</sup> *United Cable Television Services Corp. v. Dep't of Public Utility Control*, 663 A.2d 1011 (Conn. Sup. Ct. 1995) (alleged injury to incumbent cable operator resulting from introduction of direct competition through award of second franchise was not within the zone of interests sought to be protected by state franchising statute, and incumbent therefore lacked standing to challenge award).



construction.<sup>67</sup>

38. In its comments, Home Box Office ("HBO") discusses plans by Liberty Cable Company, Inc. ("Liberty Cable") to overbuild Cablevision's Nassau County, New York systems, which serve 387,500 subscribers.<sup>68</sup> According to a July 1994 report cited by HBO, Liberty Cable had started negotiations with the Nassau County Village Officials Association to provide cable service over the network infrastructure of the NYNEX Telephone Company ("NYNEX") and NYNEX planned to spend \$150 million to upgrade its network to handle video transport.<sup>69</sup> As of October 21, 1995, those negotiations were reportedly still pending.<sup>70</sup>

39. Although several of the planned overbuilds mentioned in the *1994 Report* have not yet advanced to the construction phase, new overbuilding activity appears to be occurring. Most notably, Ameritech Operating Companies ("Ameritech"), several other Regional Bell Operating Companies, and a number of smaller LECs, are pursuing the construction of cable systems in their local telephone service areas.<sup>71</sup> In addition, trade press reports indicate that cable operators, either in the midst of or contemplating overbuild situations, are affiliating with non-cable companies such as telephone and power companies in order to build systems capable of offering advanced services.<sup>72</sup> There is also anecdotal evidence regarding the activities of existing municipal overbuild ventures involving local utility companies.<sup>73</sup>

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<sup>67</sup> Susan Kinsman, *Court Gives Cable Firm the Green Light; Fibervision Can Build Competing Franchise*, Hartford Courant, Aug. 22, 1995, at B7. Fibervision has also won the right to provide cable service in six towns in the Bridgeport area that are currently served by Cablevision Systems of Southern Connecticut, and had previously won a franchise in the New Britain area of the state. In addition, an application to provide service in New Haven is pending. Susan Kinsman, *Fibervision Wins 15-year Cable Franchise*, Hartford Courant, Nov. 10, 1995, at F2.

<sup>68</sup> HBO Comments at 19.

<sup>69</sup> *Comm. Daily*, July 1, 1994, at 9.

<sup>70</sup> Letter from Jay Newman, Counsel for Liberty Cable, to Commission Staff (Oct. 21, 1995).

<sup>71</sup> *Infra* sec. II.D.

<sup>72</sup> Debbie Narrod, *Overbuilds '95*, Cable World, May 1, 1995 at 49 (reporting, among others: (1) the acquisition of the cable operations of Florida Power and Light Co. by Adelphia Communications Corp., a top-10 MSO, and the formation of a limited partnership between the two; and (2) a potential partnership between PacTel and Ultronics, operator of overbuild systems in Chula Vista and National City, California).

<sup>73</sup> *Id.* For example, Paragould City, Light, Water & Cable, which operates a 63 channel  
(continued...)

40. As pointed out in the *1994 Report*, the limited extent of overbuild competition may be attributable, in part, to local franchising requirements.<sup>74</sup> In order to address one of the potential impediments to overbuild competition imposed by the franchising process, Congress amended Section 621(a)(1) of the Communications Act in the 1992 Cable Act to provide that "a franchising authority may not grant an exclusive franchise and may not unreasonably refuse to award an additional competitive franchise."<sup>75</sup>

41. Since the *1994 Report* was released, a split has developed among the federal circuit courts of appeal over the application of Section 621(a) to franchises in existence at the time the 1992 Cable Act was enacted.<sup>76</sup> Commenters disagree whether exclusive franchises are an impediment to competition, and whether Section 621(a) should be applied to existing franchises. James Cable Partners ("James"), the plaintiff in a case in the Sixth Circuit, argues that exclusive contracts are not an impediment to competition, that there are very few exclusive franchises, and the impact on the industry as a whole is thus *de minimis*.<sup>77</sup>

42. Other commenters argue that since exclusive franchising is an impediment to the expansion of overbuild competition, Section 621(a) should be applied to prohibit the enforcement of existing exclusive franchises.<sup>78</sup> GTE Service Corporation ("GTE") argues that existing exclusive franchises prevent prospective entrants from effectively negotiating with

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<sup>73</sup>(...continued)

system in Paragould, Arkansas, providing 51 channels of basic cable service to 4,250 subscribers for \$12.50 per month, plans to offer security services and electricity load management services to its cable subscribers by year-end. In addition, Glasgow Electric, a municipal cable overbuilder in Glasgow, Kentucky, which we discussed in the *1994 Report*, has developed a citywide local area network and, despite its relatively small size of 2,650 subscribers, is planning to offer advanced, ancillary services, including cable Internet links, in the near future. *Id.*

<sup>74</sup> *1994 Report*, 9 FCC Rcd 7472 ¶ 60 n.136. See also Cable Television Consumer Protection and Competition Act of 1992 ("1992 Cable Act"), Pub. L. No. 102-285, sec. 2(a)(2), 106 Stat. 1460 (1992), *codified at* 47 U.S.C. § 521, *et seq.*

<sup>75</sup> Communications Act § 621(a), 47 U.S.C. § 541(a).

<sup>76</sup> Compare *Cox Cable Communications, Inc. v. United States*, 992 F.2d 1178 (11th Cir. 1993) (applies to existing exclusive franchises) with *James Cable Partners v. City of Jamestown*, 43 F.3d 277 (6th Cir. 1995) (applies only to new grants of exclusive franchises).

<sup>77</sup> James Comments at 12, 14-15.

<sup>78</sup> See, e.g., *GTE Reply Comments* at 10-11; *Ridgebury Township, Pennsylvania*, and the *Pennsylvania State Association of Township Supervisors ("Ridgebury") Reply Comments* at 3-4, 7-8.

local franchising authorities for competitive franchise contracts.<sup>79</sup> Likewise, Ridgebury Township, Pennsylvania, and the Pennsylvania State Association of Township Supervisors ("Ridgebury") argue that exclusive franchises "create barriers," and believes that many rural communities, like Ridgebury Township, granted exclusive franchises "at times when few, if any, viable alternatives existed."<sup>80</sup> Ridgebury attributes certain negative experiences with its exclusive franchisee to its inability to award a competitive franchise. Ridgebury believes that its problems are not unique, and are likely to arise in other communities that have entered into exclusive franchise contracts with cable operators.<sup>81</sup>

43. BellSouth Telecommunications, Inc. ("BellSouth") argues that the franchising process itself, even absent exclusivity, is a substantial impediment to competition that imposes significant costs on potential competitors.<sup>82</sup> It asserts that the cable industry uses the franchising process as a means to impose on potential competitors expensive and burdensome requirements such as universal service.<sup>83</sup>

44. As we have previously recognized, we continue to believe that franchising requirements -- including the imposition of such requirements as universal service and the enforcement of exclusive franchises -- can be an impediment to overbuild entry.<sup>84</sup> Accordingly, we continue to support clarification of Section 621(a) to make clear that it applies to enforcement of all exclusive franchises regardless of when they were adopted.<sup>85</sup>

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<sup>79</sup> GTE Reply Comments at 10-11.

<sup>80</sup> Ridgebury Reply Comments at 4.

<sup>81</sup> *Id.* at 8.

<sup>82</sup> BellSouth Reply Comments at 1-4.

<sup>83</sup> *Id.* at 2. In support of its views, BellSouth submitted an analysis, *Report on Cable Franchising as a Barrier to Competition*, by Dr. Thomas W. Hazlett. *Id.*, Att. A. Dr. Hazlett attributes limited competitive entry by cable systems to the franchising process, which he argues is inherently anticompetitive because it levies a "large and asymmetric" burden of proof on potential entrants, which skews the process in favor of the incumbent. *Id.* ¶ 7. In addition, according to Dr. Hazlett, the incumbent has the incentive and ability to engage in a variety of protectionist activities that far outweigh what typical potential competitors can afford to risk in attempting to obtain a competitive franchise. *Id.* ¶¶ 9, 14.

<sup>84</sup> 1994 Report, 9 FCC Rcd 7472 n.136; 1990 Cable Report, 5 FCC Rcd at 5035-37 ¶¶ 138-142. See also 1992 Cable Act, sec. 2(a)(2), 106 Stat. at 1460

<sup>85</sup> See 1994 Report, 9 FCC Rcd at 7557-58, ¶ 251.

## 5. *Cable Systems' Responses to Competition*

45. There is anecdotal evidence of various steps cable operators apparently have taken to retain their share of the MVPD market in response to the increased numbers of consumers choosing to subscribe to the services of competing MVPDs. In Omaha, Nebraska, the incumbent cable operator has modified the pricing of the package of services it provides to its customers, apparently in response to the emergence of competition from a VDT system. According to one report, two days before U S West's tariff for its Omaha VDT market trial went into effect, Cox, one of Omaha's local cable operators, announced that it was offering a "free" 21-channel lifeline service, called Cox Localink.<sup>86</sup> New subscribers reportedly must pay a \$19.95 installation fee, and existing subscribers can switch to the new service for an \$8.03 one-time fee.<sup>87</sup>

46. Jones Intercable, Inc.'s ("Jones") system in Alexandria, Virginia provides another example of a cable operator preparing to compete with a LEC. In September 1995, Jones began connecting subscribers to a new, \$35 million hybrid fiber coax ("HFC") network.<sup>88</sup> Initially the network will be used to provide increased channel capacity.<sup>89</sup> However, Jones reportedly plans to expand its services to include telephony and Internet access.<sup>90</sup> According to Jones's President, James O'Brien, "This system places us firmly in front of the Bell Atlantic Corporation ("Bell Atlantic") in the ability to offer a complete slate of services to area residents."<sup>91</sup>

47. Cable operators are also merging and trading systems to create clusters, which has been attributed to a response to competitors and potential competitors that can operate on a regional basis.<sup>92</sup> These regional groupings of cable systems under common ownership could permit operators to offer uniform packages at comparable prices throughout an area and to

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<sup>86</sup> *Cox Offered Free Service Cable Tier To Omaha Customers As US West Looms*, Comm. Daily, Aug. 30, 1995, at 1.

<sup>87</sup> *Id.*

<sup>88</sup> *Information Access Co., Advanced Jones Fiber Network Poised To Provide Telephony At No Extra Cost To It*, 15 Fiber Optic News No. 38 (1995). The HFC architecture is discussed in more detail below in Section III.C.

<sup>89</sup> *Id.*

<sup>90</sup> *Information Access Co., U.S. Cities Turning Into Battle Grounds For Telecom Competition: Northern Virginia, Omaha, Neb., Subs See Plenty Of Video Choices*, 3 Interactive Video News No. 20 (1995).

<sup>91</sup> *Advanced Jones Fiber Network*, *supra*.

<sup>92</sup> *Infra* Section III.A.

market their services accordingly. In two recent proposals to resolve rate complaints, cable operators sought provisions that would allow them to offer similar packages at similar prices in contiguous merged systems.<sup>93</sup>

## **B. Direct-To-Home Satellite Services**

48. Direct-to-home ("DTH") satellite services use satellites to deliver video programming directly to subscribers. There are two different types of DTH services: direct broadcast satellite ("DBS") services and home satellite dish ("HSD") services. Both offer subscribers many of the same satellite delivered video programming services typically provided by cable systems, in addition to some offerings not typically available from cable systems. DBS operators are like other MVPDs in that they are distributors that (1) downlink programming from many different satellites pursuant to contracts with programmers; (2) package the programming into service offerings; and (3) make the programming available to subscribers over a proprietary facility. However, DBS services use satellites instead of broadband wires or terrestrial microwave stations to transmit their programming to subscribers, who generally use relatively small (18-24 inch) dishes to receive the programming. By contrast, HSD users employ relatively large (4-8 foot) dishes to receive unscrambled programming for free, and scrambled programming in a secondary market from program packagers that are licensed to facilitate subscribers' receipt of programming transmitted from various C-Band satellites, which is also received by cable operators and other MVPDs. HSD users typically purchase HSDs from equipment dealers, and obtain their programming separately from program packagers, some of which also sell receiving equipment. The program packagers authorize subscribers to use the receivers connected to their HSDs to decode and view the programming.

### **1. Direct Broadcast Satellite Services**

49. *Subscribership.* In the past year, subscribership to DBS services has increased rapidly. Between the end of 1994 and the end of September 1995, subscribership increased from approximately 600,000 to about 1.7 million households.<sup>94</sup> During the same time period, the availability of DBS service has expanded from 23 states to all 48 contiguous states and Alaska.<sup>95</sup> The monthly gain in new DBS subscribers slowed during the spring and early

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<sup>93</sup> See *Social Contract for Time Warner Cable*, Memorandum Opinion & Order, \_\_ FCC Rcd \_\_\_, FCC 95-336 (Nov. 30, 1995); *Cox Communications, Inc. & Times Mirror Cable Television, Inc. (Rate Complaints)*, Order, 10 FCC Rcd \_\_\_, FCC 95-396 (Sept. 15, 1995) (both of these examples involved migrated product tiers).

<sup>94</sup> *Infra* Appendix G, Table 1.

<sup>95</sup> DIRECTV Comments at 1; State of Hawaii Reply Comments at 1; *Satellite and International*, Comm. Daily, Oct. 17, 1995, at 9; DIRECTV Fax, Oct. 20, 1995.

summer of 1995, but began to increase in August.<sup>96</sup> For example, DBS services reported only 100,000 new subscribers in July, after which the number of new subscribers increased to 155,000 in August. The increase in August may reflect lower prices and new financing options for receiving equipment, and the availability of new programming packages, which we will discuss in the paragraphs below addressing individual DBS suppliers.<sup>97</sup>

50. DBS service providers and industry observers predict that DBS subscribership growth will continue at a rapid rate. One analyst expects the DBS industry to serve 3 million subscribers by the end of 1996 and 6 million subscribers by 1999.<sup>98</sup> Other estimates of the total number of DBS subscribers at the end of the decade range from a minimum of 4.66 million to a maximum of over 21 million, with a consensus estimate of 10 million subscribers.<sup>99</sup>

51. *Individual DBS Service Providers.* Two high power DBS services and one medium power DBS service currently provide programming to subscribers.

- DIRECTV offers a high power DBS service to subscribers who have the Digital Satellite System ("DSS"), which uses an 18-inch receiving dish in all 48 contiguous states.<sup>100</sup> Subscribership to DIRECTV's services increased from a total of approximately 300,000 at the end of 1994<sup>101</sup> to 600,000 by June 1995, and to an estimated 900,000 in September 1995.<sup>102</sup> DIRECTV projects that 1.5

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<sup>96</sup> *Numbers Down, Spirits High*, SkyREPORT, Sept. 1995, at 10-13.

<sup>97</sup> The smaller gain in subscribers in July may reflect normal seasonal variations in demand.

<sup>98</sup> John Aronsohn, *DBS: Here Today . . . But Is It Here to Stay*, The Yankee Group (White Paper), Aug. 1995, at 3.

<sup>99</sup> Tom Kerver, *Between the Lines: DBS Disagreements Emerge*, Cablevision, Nov. 14, 1994, at 6. The 4.66 million figure comes from a "conservative" scenario projected by Paul Kagan Associates, Inc. The 21 million figure comes from an "aggressive" scenario presented by Stanley Hubbard, President of USSB. *Id.* See also *Will DBS Make Dollars and Sense?*, SkyREPORT, Nov. 1994, at 1; Richard Bilotti, Marc E. Nabi & Eric G. Takada, *Cable Television Metamorphosis--The Arrival of DBS and RBOC Competition*, Morgan Stanley Industry Research, Sept. 15, 1995, at 3;

<sup>100</sup> It appears that subscribers in Alaska may have to use larger (i.e., 4' to 8') receiving dishes. See, e.g., *Satellite and International*, Comm. Daily, Oct. 17, 1995, at 9; and DIRECTV Fax, Oct. 20, 1995.

<sup>101</sup> *C-Band Shipments Continue to Slide*, SkyREPORT, Jan. 1995, at 7.

<sup>102</sup> *DTH Industry Continues Fast Track*, SkyREPORT, Oct. 1995, at 6.

million households will subscribe to its services by the end of 1995, and 10 million by the end of 2000.<sup>103</sup> DIRECTV provides approximately 150 channels of entertainment and informational programming, of which, approximately 50 are pay-per-view movie and sports programming channels.<sup>104</sup>

- United States Satellite Broadcasting Company, Inc. ("USSB") offers a high power DBS service to subscribers using the same DSS receiving equipment, and one of the same satellites, as DIRECTV. Because DIRECTV and USSB offer mutually exclusive programming, a customer must subscribe to both services in order to receive all of the most popular cable programming. Nearly all subscribers to one service also subscribe to the other.<sup>105</sup> USSB currently offers twenty channels of movies and other programming.<sup>106</sup>
- Primestar Partners, L.P. ("Primestar") offers a medium power DBS service to subscribers using 36-inch or 40-inch dishes.<sup>107</sup> Primestar is a joint venture of five cable MSOs, and GE American Communications, Inc.<sup>108</sup> Using a satellite operating in the Fixed Satellite Service ("FSS"),<sup>109</sup> Primestar provides 73 channels of video programming similar to that offered by DIRECTV and USSB. The number of subscribers to Primestar's service increased from about 70,000 in June 1994 to approximately 500,000 in June 1995,<sup>110</sup> and to approximately 775,000 in September 1995.<sup>111</sup>

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<sup>103</sup> DIRECTV Comments at 1, 5.

<sup>104</sup> DIRECTV Comments at 6; Satellite Broadcasting and Communications Association of America ("SBCA") Comments at 7.

<sup>105</sup> DIRECTV Comments at 5; USSB Reply Comments at 2.

<sup>106</sup> SBCA Comments at 7.

<sup>107</sup> Rich Brown, *DBS Duelers Cross Swords in New York*, Broadcasting & Cable, Mar. 21, 1994, at 40; Arietta, *New York to Be the Nation's First Digital Town*, PR Newswire, Sept. 8, 1994.

<sup>108</sup> The MSO partners are Comcast, Continental Cablevision, Cox Enterprises, TCI and Time Warner. Together, these MSOs are affiliated with cable systems that serve approximately 60% of cable subscribers nationwide. *E.g., infra* Appendix G, Table 2.

<sup>109</sup> Primestar Comments at 2.

<sup>110</sup> *Id.*

<sup>111</sup> *DTH Industry Continues on Fast Track*, SkyREPORT, Oct. 1995, at 6.

52. Several firms are planning to initiate new DBS programming services:

- EchoStar and its affiliate, Directsat, plan to offer approximately 126 channels of programming on satellites that they expect to launch in late 1995 and early 1996.<sup>112</sup> Philips Consumer Electronics has announced an agreement to manufacture DBS receivers for EchoStar to be distributed under the Magnavox and Philips labels.<sup>113</sup> EchoStar expects to price its receiver system at about \$500.<sup>114</sup>
- AlphaStar, a Canadian DBS firm, is reportedly scheduled to offer service to the continental United States with more than 100 channels of digital video and audio programming services.<sup>115</sup> AlphaStar reportedly plans to lease twenty-four transponders on an AT&T Telstar Ku-band satellite that was launched in the fall of 1995, and to begin offering service to subscribers in early 1996.<sup>116</sup> The company currently owns an uplinking facility in Canada. The new service would apparently transmit programming over FSS frequencies to subscribers who purchase or lease AlphaStar's twenty-four inch dishes.<sup>117</sup>
- Tempo Satellite, Inc. (a wholly-owned subsidiary of TCI), is authorized to provide eleven channels of service and is required to be operational by May 1, 1998.<sup>118</sup>

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<sup>112</sup> Bilotti, Nabi & Takada, *supra*, at 5; *Satellite and International*, Comm. Daily, Sept. 21, 1995, at 12.

<sup>113</sup> Donaldson, Lufkin & Jenrette, *Echostar Communications Corporation*, Aug. 17, 1995, at 7.

<sup>114</sup> *Id.*

<sup>115</sup> *Satellite and International*, Comm. Daily, Aug. 22, 1995, at 8; *Direct-to-Home: Industry at a Glance*, SkyTRENDS, Sept. 1995, at 9.

<sup>116</sup> AlphaStar Digital Television, *AlphaStar Teams With DMX to Offer Digital Satellite TV Subscribers Up to 120 Channels of Pure Digital Music*, PR Newswire (Nov. 30, 1995); AlphaStar Television Network, *Tee-Comm Launched AlphaStar, America's New High-Powered Digital DTH Service* (press release), Mar. 4, 1995; Linda Haugsted & Kent Gibbons, *Canadian Co. AlphaStar Joins Crowded DBS Field*, Multichannel News, Mar. 20, 1995, at 3; Mary Hillebrand, *Tee-Comm Targets Share of U.S. DBS Market*, Sat. Bus. News, Mar. 15, 1995, at 1.

<sup>117</sup> *Id.*

<sup>118</sup> *Tempo Satellite Inc. (Petition for Recon. & Clarification & Assignment of DBS*  
(continued...)



- Continental Satellite Corporation ("CSC") has been assigned eleven DBS channels at both the 61.5° and 166° orbital locations.<sup>119</sup> On November 21, 1995, CSC was granted an extension of its conditional construction permit to August 15, 1999, which will allow CSC to construct, launch, and begin operating its DBS system at two orbital locations.<sup>120</sup>
- Dominion Video Satellite, Inc. originally held construction permits for DBS frequencies and channel assignments at the 119° orbital position, but those permits were cancelled by the Commission.<sup>121</sup> Dominion was recently assigned eight DBS channels at the 61.5° orbital location, and may be assigned eight additional channels at the 166° orbital location.<sup>122</sup>

53. *Receiving Equipment.* In order to subscribe to services offered by DIRECTV and/or USSB, consumers must purchase DSS receiving equipment. Thomson Consumer Electronics ("Thomson"), under the brand name RCA,<sup>123</sup> was the only manufacturer of DSS

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<sup>118</sup>(...continued)

*Orbital Positions & Channels*), Memorandum Opinion & Order, File No. DBS 88-04, 7 FCC Rcd 6597, 6600 ¶ 17 (1992) ("*Tempo Assignment*").

<sup>119</sup> *Continental Satellite Corp. (Assignment of DBS Orbital Positions & Channels)*, Memorandum Opinion & Order, File No. 87-01/49-SAT-TC-95, 10 FCC Rcd \_\_\_, DA 95-1733 ¶ 44 (Aug. 4, 1995).

<sup>120</sup> *Continental Satellite Corp. (Applications for Extension of Construction Permit)*, Memorandum & Order, File No. 130-SAT-EXT-95, \_\_ FCC Rcd \_\_\_, DA 95-2347 ¶ 4 (Nov. 21, 1995).

<sup>121</sup> *Dominion Video Satellite Inc. (Application for Extension of Permit, and Assignment of Orbital Positions & Channels)*, Memorandum Opinion & Order, File No. DBS 81-08/84-05/92-01MP, 8 FCC Rcd 6680 ¶ 41 (1993), *recon. denied*, \_\_ FCC Rcd \_\_\_, FCC 95-421 (Oct. 1995). The Commission assigned the channels to TCI's subsidiary, Tempo. *Tempo Assignment*, 7 FCC Rcd at 6600 ¶ 17

<sup>122</sup> *Dominion Video Satellite, Inc. (Assignment of DBS Orbital Positions & Channels)*, Memorandum Opinion & Order, File No. DBS 81-08/84-05/92-01MP, \_\_ FCC Rcd \_\_\_, DA 95-1734 ¶ 13 (Aug. 7, 1995).

<sup>123</sup> Starting in June 1994, Thomson/RCA had an exclusive contract to produce DSS units for the first eighteen months or one million units, whichever occurred first. *E.g., 1994 Report* 9 FCC Rcd at 7475 ¶ 65. It appears that Thomson/RCA shipped its one millionth dish in April 1995. Mary Hillebrand, *Thomson Ships Millionth DBS System*, Sat. Bus. News, Apr. 26, 1995, at 1.